

PO-39*Track: Others - Animal Biotechnology***ASSOCIATION OF POLYMORPHISM IN OLR1 GENE WITH MILK PRODUCTION TRAITS IN IRANIAN HOLSTEIN DAIRY CATTLE****Masuod Soltani, Saeid Ansari Mahyari, Gholam Reza Ghorbani and Mohammad Ali Edriss***Department of Animal Science, Isfahan University of Technology, Isfahan, Iran;
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The role of oxidized low-density lipoprotein receptor 1 (OLR1) in lipid metabolism and the results of previous QTL studies prompted the investigation of OLR1 as a candidate gene affecting milk production traits. The present study investigated the impact of single nucleotide polymorphism (SNP) in the untranslated region of OLR1 gene (OLR1g.8232 C >A) on milk production traits in Holstein Dairy Cattle. The analysis was conducted on 408 Iranian Holstein cows in five farms located in Isfahan province. Genotypes were identified using PCR-RFLP technique. Fragments with 270 bp indicated allele A and those with 250 bp and 20 bp represented allele C. Using SAS software (Proc GLM), the effect of the polymorphism on milk production traits was investigated. Results showed that individuals with genotype CC had significantly more fat percentage in comparison with genotypes AC and AA ($P < 0.001$). Furthermore cows carrying genotype CC and AC showed significantly more milk fat yield compared to genotype AA ($P < 0.01$). This SNP or another SNP that is in linkage disequilibrium, might influence the expression level of OLR1. Regarding the association between the polymorphism and these traits, the SNP has potential to be used as a marker in marker-assisted selection programs.

Keywords: OLR1 Gene, Polymorphism, Milk Fat.**PO-9***Track: Medical Biotechnology***PREPARATION OF PHOTO CURABLE NATURAL POLYMER DERIVATIVES FOR MEDICAL APPLICATION****Tae-II Son, Yoshihiro Ito, Ju-Young Yun, Kwang-II Kim, Ha-Na Na, Si-Yoong Seo, Shin-Hye Park, and Hyung-Jae Lee***Department of Biotechnology, Chung-Ang University, Anseong, Gyeonggi-do 456-756, Korea;
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Principally, chemical and physical methods have been used for immobilizing bioactive materials. However, there are some of drawbacks with those methods. For example, not only chemical method may produce potential toxic by-product and, the cost is high but also in case of physical method shows low efficiency of immobilizing bioactive material and it is difficult to control the best condition of reaction. To solve these problems, recently, immobilizing bioactive materials by photo reaction has been researched widely. The advantages of photo-immobilizing are 1) high selectivity of chemical reactions or processes under mild conditions (ambient temperature of also much below), 2) typically no need for added catalysts or special solvents, 3) spatially addressable effects (2D and 3D structuring possible), 4) applicable to very small and (relatively) large scales and 5) simple procedures. To use for photo-immobilization, various natural polymers, such as gelatin, chitosan, hyaluronic acid are reacted by irradiation to UV or visible light. They could be applied for medical area widely. For example, coating agent for bioinert devices such as stent and implant, anti-adhesive agent, wound dressing and bio-adhesive.

Keywords: Photo reaction, immobilizing, release, medical application.